EXHIBIT 39

Reply Class Certification Report of Hal J. Singer, Ph.D. in the *Johnson v. Arizona Hospital Care Association* case, No. 07-01292 SRB (D. Ariz. June 23, 2009)

UNITED STATES DISTRICT COURT
DISTRICT OF ARIZONA

CINDY JOHNSON, STEPHANIE L WALKER, BARBARA A. CRAIG, on behalf of themselves and all others similarly situated, Plaintiffs, v. ARIZONA HOSPITAL AND HEALTH-CARE ASSOCIATION; AzHHA SERVICE CORPORATION; et. al Defendants.	**No. 07-01292 (SRB)** **REPLY CLASS CERTIFICATION REPORT OF HAL J. SINGER, PH.D.**

CONFIDENTIAL—SUBJECT TO PROTECTIVE ORDER

I. INTRODUCTION AND SUMMARY OF CONCLUSIONS

1. I have been asked by counsel for Plaintiffs to review and comment on the class-certification report of Dr. David T. Scheffman and on Defendants' Response to Plaintiffs' Motion for Class Certification. In addition to reviewing Dr. Scheffman's report, I have also examined his backup data, read his deposition, and reviewed his notes of interviews with various hospital and agency personnel. A list of the materials I have reviewed since submitting my earlier report is attached as Appendix A.

2. Upon review of Dr. Scheffman's report and the other materials, I continue to conclude that impact to Class members here may be analyzed and demonstrated using predominantly common methods and proof, and that damages to the Class may be reliably estimated in the aggregate for the Class as a whole.

3. Dr. Scheffman implies in his report that wages received by all Class members must be identical for impact and damages to be susceptible to proof on a class-wide basis.[1] He is plainly wrong. A sufficient condition for class-wide analysis is that prices are anchored to some common element, such as a list price (or in this case, the AzHHA-determined standardized bill rates). As Dr. Scheffman has written:

> Non-uniform products and pricing, however, are not, alone, generally sufficient to defeat class certification. A number of courts have found it appropriate to certify classes . . . where prices across products or across purchasers are highly variable and even in circumstances where prices are negotiated individually with proposed class members. In certain of these circumstances, courts have found that even though there is tremendous variation in prices across customers, *the prices are based on some common pricing mechanism—a 'base' price.*[2]

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1. *See* Class Certification Declaration of David T. Scheffman, April 3, 2009, ¶ 201 [hereinafter *Scheffman Report*].
2. *See* David Scheffman, Economic Analyses Relevant to Class Certification, Law Seminars International, Litigating Class Action Suits, May 10, 2007, at 7 (emphasis added).

As I discussed in my report,[3] the common element in this case or "base price" was the AzHHA-determined, standardized bill rate paid by AzHHA-member hospitals to AzHHA-member agencies during the Class Period. If this "base price" were artificially and wrongfully suppressed or deflated, as I believe occurred here, all or nearly all Class members were injured, or suffered some impact, given that Class members' pay is tied to or related to the bill rate.

4. Dr. Scheffman has spilled much ink over the purported ability of AzHHA-member hospitals to pay a bill rate other than the AzHHA-determined bill rate to AzHHA-member agencies under the terms of the AzHHA Registry agreements. *Yet in his report, Dr. Scheffman does not cite anything proving that any AzHHA-member hospital actually invoked that option and paid a higher (or lower) bill rate (relative to the AzHHA-determined rate) to an AzHHA-member agency for any temporary nurse[4] hours purchased during the Class Period.* This omission is pivotal. Dr. Scheffman [redacted].[5] Yet as the record stands, Dr. Scheffman has not shown that AzHHA-member hospitals paid bill rates different from the standardized, AzHHA-determined rates to AzHHA-member agencies.[6]

5. The setting of standardized bill rates lends itself naturally to analysis of impact and damages on a common, class-wide basis. The wage earned by a particular Class member during a particular time equals the product of the "base rate"—that is, the AzHHA-determined bill rate, which was fixed and is known—and the rate or proportion of the bill rate then paid to

3. Class Certification Report of Hal J. Singer, Ph.D., Dec. 22, 2008, at ¶ 21 [hereinafter *Singer Report*].
4. By "temporary nurse," I mean all temporary nursing personnel included in the Class.
5. Scheffman Deposition, at 15: 18-25, 16: 1-7 [redacted]
6. And as I explain further below, even if evidence of deviations turns up, that would not prevent class-wide analysis of impact, given the existence of standardized ("base") bill rates here.

the Class member. Accordingly, common evidence that the base rate was deflated by the anticompetitive conduct alleged constitutes common evidence of impact. Suppose one Class member, for example, earns 74 percent of the (deflated) AzHHA-determined bill rate of $40 per hour; while another is paid 60 percent and another 57 percent. Although the compensation among these three varies, an artificial decrease or depression in the common bill rate necessarily impacts all three. Put another way, had the bill rate been $50 per hour instead of $40 per hour, all three Class members would have received more money, because at whatever percentage of the bill rate that is paid to the Class member, a higher bill rate yields a higher number. Because Dr. Scheffman fails to show any substantial and widespread deviation (or really, any deviation at all) from the AzHHA-determined, standardized bill rate, it follows that impact and aggregate damages here may be demonstrated using methods common to the class as a whole.

6. Dr. Scheffman suggests that the payment of bonuses by Defendant hospitals may qualify in some sense as evidence that Defendant hospitals paid "rates" different than the AzHHA-determined, standardized rates. As a preliminary matter, although he testified [redacted].[7] Moreover, there is evidence in the record that bonuses were also suppressed, and they were subject to anticompetitive agreements or direct discussions among the defendants or both. Accordingly, it would not be appropriate to view bonuses as in any way "offsetting" depressed wages. Indeed, given the evidence of Defendants' anticompetitive conduct with regard to bonuses, it may be appropriate to include, in a merits analysis of damages, a component for damages relating to bonuses.

7. Scheffman Deposition, at 192: 12-23 [redacted]

7. My reply report is organized as follows:

8. In Part II, I review materials, including Dr. Scheffman's deposition, produced since my earlier report, further evidencing Defendants' anticompetitive conduct. For example, Dr. Scheffman admits [redacted] As the testimony of former AzHHA administrators confirms, [redacted] In his report, Dr. Scheffman also attempts to [redacted] But at his deposition, [redacted] .[8] Neither can I. Dr. Scheffman further claims that [redacted] First, even if that were so, it would not undermine or contradict the extensive direct evidence in the record that Defendants in fact succeeded in suppressing rates. Moreover, Dr. Scheffman fails to cite any evidence that the Defendants' *total* purchases of temporary nursing personnel hours increased (controlling for other factors, such as number of beds increasing or decreasing). Also, Dr. Scheffman ignores ample evidence that, consistent with monopsony theory, AzHHA took steps to ensure that Defendant hospitals did *not* purchase from outside the Registry, thereby suppressing total overall demand for temporary nurse hours in Arizona.

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8. *Id.* at 108: 14-19 [redacted]

9. In Part III, I respond to Dr. Scheffman's criticisms regarding my analysis of common impact on bill rates, including my use of the Consumer Price Index (CPI) to compare bill rates in successive years in real terms. Dr. Scheffman's criticisms are misguided. He misstates the intent of my analysis and conflates inflation adjustments with the creation of a but-for world. Dr. Scheffman ignores entire sections of my initial report discussing the multiple complementary, common methods by which impact here may be shown on a common basis.

10. In Part IV, I respond to Dr. Scheffman's additional criticisms regarding my analysis of common impact on Class members. Dr. Scheffman asserts that impact cannot be demonstrated on a common basis using common proof because allegedly "agency and temp decisions on compensation do not follow bill rates and are often the product of individual decisions and negotiation."[9] In my initial report, I cited data from Health Temp, one of the largest agencies, that [redacted] and Dr. Scheffman himself repeatedly cites to Health Temp's experience in his own report. After the date of my initial report (though before Dr. Scheffman submitted his report), additional data were obtained from another agency—[redacted] Though Dr. Scheffman did not mention this data in his report, the data confirm [redacted] An analysis of the relationship between bill rates and nurse wage rates for several other agencies (data also obtained since my initial report), including [redacted] reveals [redacted] Also, a number of the agency declarations that defendants submitted, as well as agency interviews that Dr. Scheffman conducted, [redacted] Such inter-agency

9. *Scheffman Report*, ¶ 202.

competition—in an environment of an ongoing, severe nursing shortage—would ensure that, had AzHHA's bill rates been higher (as they likely would have been but for the challenged conduct), then all or nearly all Class members would have received higher pay as a result. That competition for nurses along with evidence of suppressed bill rates for AzHHA-member agencies establishes common impact, as the amount of impact from Class member to Class member need not be identical.

11. In Part V, I respond to Dr. Scheffman's arguments concerning market definition. As a general matter, I understand from the court's previous rulings that the challenged conduct, if proven, may constitute a *per se* violation of the antitrust laws,[10] in which case there is no need to define a relevant antitrust market. Moreover, even under a rule-of-reason standard, I understand that there is no need or requirement to conduct a market-definition analysis where anticompetitive effects may be proven directly, as they can here. A market-definition analysis is thus premature (and may never be necessary). Indeed, Dr. Scheffman himself acknowledged during his deposition that he [redacted] In explaining [redacted] In any event, the alleged market complexities that Dr. Scheffman discusses are belied by record evidence that AzHHA and the hospital Defendants used the exact same averaging methods to set bill rates for all categories of temporary nurses, and for both the northern and southern per diem parts of the Registry, and for the travel portion. I have seen no evidence that any of the purported "complexity" that Dr. Scheffman discusses

10. Order on Motion to Dismiss, March 19, 2009, at 7 ("For the purposes of this Motion, Plaintiffs have alleged facts sufficient to support a claim of per se illegality.").

actually hindered AzHHA and Defendants from setting standardized rates for all Class members in the same way.

12. In Part VI, I respond to Dr. Scheffman's perfunctory criticisms of my proposed damages models. Here again, AzHHA itself repeatedly estimated the "savings" obtained by the hospitals as a result of the Registry, and these calculations were done on an aggregate basis, using an estimate of the "savings" on a per-hour basis multiplied by the total hours purchased. Defendants' own calculations show that such aggregate analyses can be done.

13. In Part VII, I respond to Dr. Scheffman's suggestion that Defendants' anticompetitive actions may have produced certain efficiencies that may relate to class-wide analysis. Dr. Scheffman's claims can be easily dismissed, as he ignores record evidence that Defendants did not need to fix prices to achieve any of the claimed efficiencies.

II. DR. SCHEFFMAN IGNORES EVIDENCE OF DEFENDANTS' ANTICOMPETITIVE CONDUCT

14. In his report, Dr. Scheffman either ignores or discounts evidence of Defendants' anticompetitive conduct. When analyzed in detail, these omissions cast serious doubt on the credibility of his conclusions.

A. Dr. Scheffman Fails to Support His Claim that AzHHA-Member Hospitals Paid Bill Rates to AzHHA-Member Agencies that Differed from the Standardized, AzHHA-Set Rates

15. In his report, Dr. Scheffman repeatedly suggests that [redacted] [11]

11. *Scheffman Report*, ¶¶ 44, 108-111.

Dr. Scheffman also suggests [redacted] [12] He is wrong on both counts.

16. Although Dr. Scheffman refers to [redacted] he acknowledged that [redacted] and [redacted] [13] Most significantly, at his deposition, [redacted] The agreement [redacted] [14] But when Dr. Scheffman was [redacted] [15] Furthermore, Dr. Scheffman's [redacted] cannot alter this fact, and there is record evidence that Defendants communicated with each other directly to suppress bonuses, as well.

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12. *Id.* ¶¶ 109, 111.
13. Scheffman Deposition, at 272: 11-19 [redacted]
14. *Id.* at 124: 20-25, 125: 1-5 (referencing Exhibit 565) [redacted] *Id.* at 125: 20-25, 126: 1-4 [redacted]
15. *Id.* at 127: 7-25, 128: 1-9 [redacted]

1. Evidence Shows That Defendants Colluded on Bill Rates and Bonuses

17. Dr. Scheffman, in his report, ignores a wealth of record evidence cited in my initial report that Defendants directly discussed hourly bill rates and bonuses.[16] This evidence includes documents from AzHHA meetings, memoranda from AzHHA to member hospitals, and emails among AzHHA staff and AzHHA-member hospitals.[17] For example, Mr. Charles "Bud" Zomok, who was the director of the AzHHA Registry Program between November 2002 and May 2007, was deposed in this case on March 18, 2009, after my earlier report but before Dr. Scheffman's own report (which was dated April 3, 2009). Yet Dr. Scheffman failed to address or even acknowledge Mr. Zomok's testimony.

18. Evidence that the Defendant hospitals explicitly discussed bill rates with each other is made abundantly clear in an April 8, 2003, email from Mr. Zomok to numerous hospital representatives:

> I've enclosed the 2003-2004 current RFP rates and what the numbers would look like with the additional bump . . . Please take a look and let me know how you would like me to proceed . . . I know the hospitals create the rates, but we also need to ensure that we have the larger agencies in the program. I've made no commitment to the agencies that I've spoken with.[18]

In response to this email, Troy Garland, a representative of Chandler Regional Hospital, *replied to all AzHHA-member hospitals*: "Chandler does not support the $1.50 increase."[19] Tanis McShannock from St. Joe's, another AzHHA-member hospital, *replied to all AzHHA-member hospitals*: "I have discussed this issue with senior leadership at St. Joe's. We would like to hold with the original 2003 RFP rate structure that was proposed. We do not support a $1.50

16. *Singer Report*, ¶¶ 35-39.
17. *Id.*
18. HT Exhibit 152 at CHW-C000777 to 778.
19. HT Exhibit 153 at NAH001604.

increase."[20] Representatives of Paradise Valley Hospital, Arizona Heart Hospital, Phoenix Children's Hospital, Yuma Regional Medical Center, Phoenix Memorial, and Thunderbird also *replied to all AzHHA-member hospitals*, opposing the rate increase.[21] Dr. Scheffman ignores this evidence (though at his deposition, Dr. Scheffman acknowledged [redacted][22]

19. Mr. Zomok testified that [redacted][23] Moreover, he [redacted][24] Nor did he [redacted][25] In other words, this is an example of Defendants explicitly discussing price (bill rates) with each other, and yet there is no evidence that any of the Defendants considered such discussions unusual or improper, even though various witnesses for Defendants have claimed that they understood they were not supposed to discuss price. Mr. Zomok, for example, testified [redacted]

20. HT Exhibit 153 at NAH001606.
21. See HT Exhibit 153.
22. Scheffman Deposition, at 96: 6-20 [redacted] (objection omitted).
23. Zomok Deposition, at 87-96.
24. *Id.* at 95-96.
25. *Id.* at 94-97.

[redacted][26] To an economist, such "directional opinions" clearly represent a coordinated attempt to fix prices. Yet Dr. Scheffman is silent.

20. Even if one thought—incorrectly—that price fixing requires explicit discussions of price, the record and Mr. Zomok's testimony demonstrate that such explicit discussions took place. In [redacted][27] Specifically, [redacted][28] The email included [redacted]."[29] The text of the email also [redacted]"[30] Mr. Zomok sent a [redacted] In the [redacted]

26. *Id.* at 70: 24-25, 71: 2-14 [redacted] *See also* Deposition of Cindy Scott, at 74-75 (describing an unwritten AzHHA policy that discussions on rates should be confined to whether rates are too high or too low, rather than mentioning specific rates).

27. *See* Exhibit 620.

28. *See* Zomok Deposition at 150-153.

29. *See* Exhibit 620.

30. Exhibit 620 at TMC-09E-5264.

[redacted]"[31] [redacted] [32] In response to this e-mail, Lois Frasure of Carondelet, an AzHHA-member hospital, *replied to other AzHHA-member hospitals* with her explicit price suggestions: "Please remember these are my comments (not necessarily endorsed by my organization)—my suggestions are in green on the attached," attaching a table of suggested rates.[33] Cynthia Schultz of University Physicians Arizona also *replied to other AzHHA-member hospitals* to Ms. Frasure's email, saying "Lois [sic] suggestions seem very reasonable to me."[34]

21. At his deposition, Mr. Zomok [redacted] [35] Mr. Zomok also [redacted] [36] Indeed, all that Mr. Zomok [redacted] [37] Such express communications about bill rates are clear evidence of price fixing. Yet Dr. Scheffman ignores this evidence.

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31. Exhibit 621 at UMC004298.
32. *See* Exhibit 621 at UMC004298 [redacted]
33. *See* Exhibit 622 (CHN-AZ-CA621377A - CHN-AZ-CA621379A). Ms. Frasure was deposed on May 28, 2009. According to the rough transcript of her deposition, she claims [redacted]
34. Exhibit 627 at UMC011710.
35. Zomok Deposition, at 161-172.
36. *Id.* at 165-172.
37. *Id.* at 165: 2-12 [redacted] (objections omitted).

2. There is Evidence that Defendants Colluded on Bonuses As Well

22. Dr. Scheffman contends that the payment of bonuses by AzHHA hospitals to Class members complicates or may even prevent common proof of impact. I disagree. Dr. Scheffman ignores direct evidence that Defendants *also* discussed the payment of bonuses, in an effort to coordinate bonus payments and prevent competition between Defendant hospitals. Accordingly, the notion that bonuses may have somehow "offset" or "compensated" for suppressed bill rates is not supported in the record.

23. AzHHA administrators were aware of the need to control bonuses paid by member facilities, as "some facilities [hospitals] expressed concern regarding the use of bonuses creating competition."[38] [redacted] [39] [redacted] [40] Dr. Scheffman ignores or downplays this evidence.

B. Dr. Scheffman Ignores or Obfuscates Evidence of Defendants' Collusive Rate-Setting Mechanism

24. Defendants' rate-setting mechanism was consistent with collusive monopsony throughout the Class Period, notwithstanding Defendants' and Dr. Scheffman's suggestions to the contrary.[41] The evidence shows that Defendants, for most of the Class period here, set bill

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38. HT Exhibit 49 (AzNR127446-47) (AzHHA memorandum dated Oct. 29, 1998).
39. HT Exhibit 48 (AzNR127422-23) at 422 [redacted]
40. *Singer Report*, ¶¶ 35-37 (citing evidence that [redacted]
41. Defendants' Response to Plaintiffs' Motion for Class Certification, at 4, n.3 [redacted] (citing Scheffman Report ¶¶ 71, 145) [hereinafter *Defendants' Response*].

rates as the mathematical average of what Defendant hospitals wished to pay.[42] The depositions of [redacted] confirm this.

25. Dr. Scheffman [redacted] Later, [redacted] [43] In addition, there is evidence that Defendants colluded on setting bill rates even before 1997.

1. AzHHA Rate Setting During Ms. Kahn's Tenure (1997-2002)

26. Before 1997, each agency participating in the AzHHA Registry could set its own bill rate.[44] In March 1997, Becky Kahn, former AzHHA Executive Vice President and Chief Operating Officer, announced a major change in the AzHHA rate-setting process. In a series of memoranda sent to the AzHHA hospitals, Ms. Kahn wrote:

> This year we will be setting the rates ourselves and agencies will have to agree to them when they submit their proposals. In order for us to know where to set the rates, I have attached a 'Rate Survey' that I would like each of you to complete and fax back to me. I will then take each participating facility's response and average the rates. The average rate for each position will become the 'Program Rate.'[45]

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42. *See Singer Report*, ¶¶ 28-30.

43. Scheffman Deposition, at 77: 8-20 [redacted]

44. Kahn Deposition (HT), at 20: 4-11, 14-17 [redacted]

45. Memo to Southern Region: HT Exhibit 2 (AzNR132778-782), at 778; Memo to Northern Region: HT Exhibit 3 (AzNR168845-849), at 845; Memo regarding traveler nurses: HT Exhibit 7 (AzNR132966-970) at 966. Although Kahn's memo regarding traveler rates is dated April 1998, the memo notes that rates were set via hospital survey responses beginning in 1997. *Id.* ("For the first time last year, we conducted a rate survey with participating

In her deposition, Ms. Kahn testified [redacted] [46] [redacted] [47]

2. AzHHA Rate Setting During Mr. Zomok's Tenure (2003-2007)

27. In his *Health Temp* deposition, Mr. Zomok's testimony [redacted] [48]

Mr. Zomok was deposed in this case, however, on March 18, 2009, after my initial report but before Dr. Scheffman's report. At his March 2009 deposition, Mr. Zomok [redacted]

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organizations in order to establish rates for the traveling program. We will be continuing the process for this upcoming contract.").

46. Kahn Deposition (HT), at 23: 25, 24: 1-6 [redacted]

47. Although Ms. Kahn [redacted]

48. *Scheffman Report*, ¶ 71 (citing Deposition of Charles Zomok, PC Healthcare Enterprises vs. Arizona Hospital and Healthcare, et al., May 4, 2007, at 27-32) .

[redacted][49] [redacted]

[redacted]

[redacted][50]

28. Dr. Scheffman ignores evidence, cited in my initial report, that AzHHA's rate-setting mechanism was, by AzHHA's own admission, successful in ensuring that AzHHA-member hospitals were paying below-market rates for temporary nurse hours from AzHHA-member agencies throughout the Class Period.[51] AzHHA regularly presented AzHHA-member hospitals with calculations demonstrating that they were able to pay substantially *less* for temporary nurse hours through the Registry Program than they would have otherwise.[52] Dr. Scheffman admitted during his deposition [redacted]

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49. *See* Zomok Deposition, at 104 (2003-2004 Northern per diem rates); at 111-113 (2003-2004 Southern per diem rates); at 125-129 (2003-2004 Travel rates); at 184-190 (2005-2006 Southern per diem rates); at 259-261 (2006 Southern per diem rates); at 145-148 (2006-2007 Travel rates); *and* Tovar Deposition (HT) at 45-48 (2004-2005 per diem rates).

50. *See* Zomok Deposition, at 259-261 (2006 per diem rates).

51. *See* Scott Deposition (HT), at 68: 21-25, 69: 1 ("Q: It [the Registry Program] also provided them [the hospitals] low rates? A: Bill rates, yes, one set of bill rates, yes. Q: But bill rates that you thought were lower than would otherwise, would prevail in a different environment in the absence of this Registry Program? A: Yes, discounted rates, yes.").

52. *See, e.g.,* AZNR103557-58 (identifying and discussing 11 non-contract agencies charging "higher" rates); AZNR103556 (comparing "average" AzHHA rate of $47 to "average" of $57 for "non-AzHHA" agencies); CHW-S000606-610 (AzHHA memorandum dated Jan. 31, 2002, to top executives of member hospitals, providing "savings" analysis) ("Row four provides an estimate of what the non-contract RN agency usage is costing your organization using an average billing rate of $57 per hour. The actual dollar figure can be obtained directly from your staffing office and/or accounting office, we encourage you to review this number closely. Please note that the average RN bill rate through the Registry Program, if using contract agencies, is $47 per hour."); *Id.* at 610 (multiplying non-AzHHA usage by $10/hr to calculate "[a]dded cost" to AzHHA hospitals of using non-AzHHA agencies charging higher billing rates). *See also* HT Exhibit 33(AzNR171957-64) at 58 ("...there has been a lot of activity by new, aggressive non-contract agencies. Representatives of these agencies are recruiting contract nurses to work for them by offering wages of $8 to $10 more than the contract agencies are paying under our contract bill rate.") (minutes of March 1, 2002, meeting of AzHHA Service Corp. board of directors). *See* AzNR119607-625 at 621. This document identifies "[b]enefits" to hospitals as "achiev[ing] significant savings;" and benefits to their hospital association as "negotiat[ing] from a position of strength." *Id.* at AzNR119607. A cover memorandum, stating it was from John R. Rivers, the president and CEO of AzHHA, repeated the AzHHA calculations that its then-57 hospitals "together saved $12.7 million on per diem and travel nurses last year alone." These calculations are conservative for reasons that I explained in my initial report.

[redacted] [53] And despite his effort to [redacted] [54] Dr. Scheffman fails to acknowledge that AzHHA executives represented that bill rates would have been materially higher but for the challenged conduct.

29. Dr. Scheffman states in his report that [redacted]"[55] This fact is unsurprising and does not impair proof of common impact. Testimony from Becky Kahn and Charles Zomok unequivocally establishes [redacted] Importantly, the hospitals were alerted to this fact *in writing* by AzHHA *before* they submitted their proposed prices (bill rates).[56] As such, it is highly unlikely that the prices submitted by the hospitals reflected what they would be willing to pay in an open market (in light of the nursing shortage they all faced). AzHHA-member hospitals had ample incentive to propose lower bill rates to bring the overall average (and hence the final

53. Scheffman Deposition, at 19:11-19 [redacted]

54. *Id.* at 29: 24-25, 30: 1-10 [redacted] *Id.* at 38-41.

55. *Scheffman Report*, ¶ 71.

56. Memo to Southern Region: HT Exhibit 2 (AzNR132778-782), at 778; Memo to Northern Region: HT Exhibit 3 (AzNR168845-849), at 845 ("This year we will be setting the rates ourselves and agencies will have to agree to them when they submit their proposals. In order for us to know where to set the rates, I have attached a 'Rate Survey' that I would like each of you to complete and fax back to me. I will then take each participating facility's response and average the rates. The average rate for each position will become the 'Program Rate.'"); Memo regarding traveler nurses: HT Exhibit 7 (AzNR132966-970) at 966. Although Kahn's memo regarding traveler rates is dated April 1998, the memo notes that rates were set via hospital survey responses beginning in 1997 ("For the first time last year, we conducted a rate survey with participating organizations in order to establish rates for the traveling program. We will be continuing the process for this upcoming contract.").

bill rate) down. Becky Kahn acknowledged at her deposition that [redacted] [57]

3. Other Evidence Suggests That AzHHA-Member Hospitals Discussed Bill Rates Before 1997

30. Although my focus here is on Defendants' conduct during the Class Period, it is noteworthy that there is evidence suggesting that AzHHA hospitals may have been engaged in collusive price-fixing behavior before 1997. Ms. Kahn has stated that, [redacted] [58] The fact that hospitals met to discuss and set rates is by itself indicative of collusion. Ms. Kahn [redacted] ,,[59]

C. Dr. Scheffman's Attempt to Compare Defendants' Challenged Conduct to the Normal Operations of a GPO Is Completely Unsupported

31. In his report, Dr. Scheffman repeatedly tries to compare AzHHA and Defendants' anticompetitive conduct to the normal operations of a Group Purchasing Organization ("GPO"). In a normal GPO, a group of buyers (for example, hospitals), utilize an outside independent entity, which then uses the collective purchasing power of the members to negotiate discounted

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57. Kahn Deposition (HT), at 26: 25, 27: 1-9 (discussing HT Exhibit 2 AzNR132778-782) [redacted] (objection omitted).

58. Kahn Deposition (HT), at 18: 19-22 (discussing HT Exhibit 2) [redacted] *Compare with* Kahn Deposition at 37: 14-21 (discussing HT Exhibit 2) [redacted] *Id.* at 40: 20-23 [redacted]

59. *See* HT Exhibit 2; Kahn Deposition (HT), at 18: 22-24.

prices from vendors and manufacturers (for example, medical-device makers).[60] Dr. Scheffman's attempted comparison of AzHHA to a GPO is simply inappropriate and unsupported. Dr. Scheffman, for example, [redacted] [61]

32. GPOs typically allow the providers or suppliers of products or services to submit independently determined bids to the GPO. Then, depending on whether the contract is sole-source or multi-source, the best bid (or bids) from the suppliers becomes the price paid.[62] The way AzHHA and Defendants set prices beginning in 1997 bears no resemblance to a typical GPO. AzHHA was not neutral or independent as to its member hospitals. AzHHA did not use its collective purchasing power to competitively negotiate discounts from individual agencies during the Class Period.[63] Instead, AzHHA-member hospitals used their collective buying power to sidestep a competitive-bidding process altogether; set bill rates as the average of what the hospitals wished to pay; then present these prices (bill rates) to agencies on a take-it-or-leave-it

60. *Scheffman Report*, ¶ 26 [redacted]

61. Scheffman Deposition, at 108: 14-19 [redacted] *Id.* at 111: 2-7 [redacted] *Id.* at 112: 6-8 [redacted] (objections omitted). [redacted] *ee* Frasure Deposition (rough) at 212: 9-17 [redacted] (objections omitted).

62. I am very familiar with GPOs, as I have written two papers on the GPO process and have testified as an economic expert in at least two cases involving GPO conduct.

63. AzHHA member hospitals wielded significant purchasing power in the market for temporary nursing services in Arizona during the Class Period. *See* HT Exhibit 20 (AzNR31498-499) at 498 [redacted] *See* also HT Exhibit 44 (AzNR132907-922) at 907 [redacted] *See* also HT Exhibit 9 (AzNR132428-429) at 428 [redacted]

basis.[64] As Dr. Scheffman admitted, [redacted].[65] He was not able to cite any examples of *any* agencies that were able to enter the Registry without accepting as a precondition the AzHHA-determined, standardized rate.

33. At his deposition, Dr. Scheffman [redacted].[66] Dr. Scheffman [redacted].[67] He also [redacted].[68]

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64. *Singer Report*, ¶¶ 28-30.
65. Scheffman Deposition, at 93: 23-25, 94: 1-12 [redacted] (objection omitted).
66. *Id.* at 108: 14-19 [redacted] *Id.* at 111: 2-7 [redacted] *Id.* at 112: 6-8 [redacted] (objections omitted).
67. *Id.* at 114: 9-25, 115: 1-8 [redacted] (objection omitted).
68. *Id.* at 115:10-24 [redacted] (objection omitted).

D. Dr. Scheffman's Claim That Purchases from AzHHA-Member Agencies Increased Misses the Point

34. Dr. Scheffman argues that Defendants purportedly did not reduce their purchases of temporary nurse hours during the Class Period, and that absent such a reduction, the conduct would not have suppressed prices successfully.[69] However, Dr. Scheffman cites [redacted]. Moreover, this criticism appears to relate more to the *amount of the damages*, rather than the fact of injury—that is, it is akin to the issue of "cheating" by a cartel member who agrees with its competitors to artificially fix and inflate the price of the widgets they are all selling, but then makes additional sales at a lower price; such conduct does not mean the cartel was not anticompetitive. The same is true here. Record evidence shows that AzHHA administrators understood—and communicated to the hospitals—that AzHHA could better sustain below-market bill rates (in the face of a severe nursing shortage) if the hospitals did not go outside the Registry too often. AzHHA used both encouragement and threats of expulsion to ensure compliance. Dr. Scheffman ignores this evidence that AzHHA and member hospitals acted to decrease purchases of nurse hours from non-AzHHA-member agencies during the Class Period.

35. At a meeting in December 2000, [redacted][70] [redacted]

69. *Scheffman Report*, ¶¶ 25, 65.

70. [redacted] see Exhibit 710 (AzNRCA040035-59) at AzNRCA040039.

[redacted]

36. [redacted][71] [redacted][72] [redacted]

71. HT Exhibit 24 (CHW-S000694-698) at CHW-S000696 [redacted]

72. HT Exhibit 55 (AzNR168822) [redacted] *See* also Kahn Deposition (HT), at 41: 9-14. [redacted] (objection omitted). *See* also HT Exhibit 5 (HT01820-826) at 820 ("It has been reported that this non-contract agency is billing $6.00 more per hour over our contract rates and as a result, our contract agencies are losing a

[redacted] [73]

37. Dr. Scheffman thus fails to acknowledge that Defendants did act to restrict demand in accordance with monopsony theory—by decreasing AzHHA-members hospitals' purchases of nurse hours from *non-AzHHA-member* agencies.[74] AzHHA executives testified [redacted] [75] [redacted]

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number of their agency nurses to this non-contract agency. Our contract agencies are unable to meet the needs of our participating facilities because they are unable to compete with this high pay rate."). *See* also Kahn Deposition (HT), at 132: 1-18 [redacted] (objections omitted).

73. Scott Deposition (HT), at 44: 7-22 (discussing HT Exhibit 55) [redacted]

74. Kahn Deposition (HT), at 136: 11-17 [redacted] (objection omitted).

75. *Id*. at 123: 21-25 [redacted] *See also* HT Exhibit 4 (HT00031-34) at 31 [redacted]

[redacted].[76] The minutes of an AzHHA Service Corp. board meeting of Jan. 26, 2001, state [redacted]",[77] An AzHHA memo dated March 7, 2001, from Ms. Kahn to the AzHHA Service Corp. board of directors, states that, [redacted][78]

38. Dr. Scheffman argues incorrectly that [redacted][79] Even if Dr. Scheffman could show that *total purchases*—that is hours purchased inside the Registry plus hours purchased outside the Registry—had increased (which he does not show), he would still need to show how that would compare to total purchases in the but-for world (absent the challenged conduct).

39. It is unsurprising that AzHHA-member hospitals' purchases from *AzHHA-member agencies* would increase over time. That increase, combined with undisputed evidence of the severe nursing shortage, and AzHHA's [redacted]

76. *See* Exhibit 713 (AzNRCA019066-75) at 72 [redacted] (objection omitted).
77. CHN-AZ023948-52.
78. CHN-AZ-024392.
79. *Scheffman Report*, ¶ 25.

[redacted] amounts to direct evidence of the *anticompetitive effects* of Defendants' conduct.

III. IMPACT OF DEFENDANTS' CONDUCT ON BILL RATES

40. Dr. Scheffman offers several erroneous criticisms of my proposed methods for analyzing and demonstrating impact on a common or predominantly common basis. I agree that proof of impact on Class members should incorporate proof of impact on bill rates. In this section, I address Dr. Scheffman's criticisms regarding proof of impact on bill rates.

A. The AzHHA-Determined Bill Rates Were Uniform in Practice and Served as a Common "Base Rate"

41. Dr. Scheffman claims [redacted][80]. Yet he fails to demonstrate that this actually occurred. He references [redacted]"[81]

42. Dr. Scheffman admitted during his deposition that [redacted][82] He was [redacted]

43. Testimony from AzHHA administrators confirms that [redacted] Trudy Tovar, AzHHA Staffing Coordinator from

80. *Scheffman Report*, ¶¶ 75-76.
81. *Id.* ¶ 76.
82. Scheffman Deposition, at 93: 23-25, 94: 1-12 [redacted] (objection omitted).

2003-2007, testified that she did not encounter *any actual examples* of AzHHA-member hospitals deviating from the AzHHA-determined rates at any point during her tenure:

> Q So when the hospital members of the AzHHA registry program sign the rate adjustment acceptance sheet, they're all agreeing to pay the same rate as set by AzHHA; is that correct?
> A Yes, they're agreeing to those terms. But there is language in the contract for them to negotiate different rates as well.
> *Q Are you aware of any written deviations from the rate acceptance sheet that have ever been negotiated between a hospital and an agency?*
> *A I am aware that there has been talk of it. I have not seen any actual examples of it.*[83]

[redacted] [84] Dr. Scheffman ignores her testimony.

44. Registry agreements provide that [redacted]"[85] Despite what he argues in his report, at his deposition, Dr. Scheffman [redacted].[86] Instead, Dr. Scheffman [redacted]

83. Deposition of Trudy Tovar (HT), at 42: 5-16 (emphasis added).
84. *Id.* at 14: 23-25, 15: 1-8, 16: 3-5 [redacted]
85. *See* Exhibit 565.
86. Scheffman Deposition, at 135: 9-25 [redacted]

[redacted]"[87] Dr. Scheffman provides [redacted] [88]

45. Dr. Scheffman also [redacted] However, Dr. Scheffman failed to demonstrate how any of this constituted evidence of a deviation from the AzHHA-determined bill rate. For example, Dr. Scheffman stated that [redacted].[89] He claimed that [redacted].[90] However, Dr. Scheffman [redacted]

87. *Scheffman Report*, ¶ 131, n. 54 (referencing HT01060).

88. During his deposition, Dr. Scheffman pointed to [redacted] *See* Errata for Class Certification Declaration of David T. Scheffman, ¶ 8. [redacted] *See* Scheffman Deposition, at 146: 20-25, 147: 1-10 [redacted] (objection omitted).

89. Scheffman Deposition, at 153: 19-25, 154: 1 [redacted]

90. *Id.* at 153: 3-18 [redacted]

[redacted][91]

[redacted]

46. Similarly, Dr. Scheffman's claims about [redacted][92]

[redacted][93]

Dr. Scheffman's retreat from his own report culminates in his testimony that, [redacted]

[redacted]",[94]

47. As evidenced by [redacted] Defendants well understood that deviating from the AzHHA-determined rates would lead AzHHA-member hospitals down a

91. *Id.* at 167: 6-24.
92. *Id.* at 154: 3-17 [redacted]
93. *Id.* at 169: 7-18 (emphasis added).
94. *Id.* at 174: 8-10. [redacted]

slippery slope directly at odds with their primary incentive—purchasing temporary nursing hours at depressed rates.

48. Setting aside Dr. Scheffman's unsubstantiated claims about variation in actual hourly billing rates, the remaining evidence he cites [redacted] [95] These activities, insofar as they actually occurred, are possibly forms of discounts or supplements to a standard (depressed) billing rate. Any such deviations paid over the base billing rate do not pose any difficulty for class-wide analysis, as they are necessarily anchored in the standard (depressed) AzHHA-determined bill rates.

49. Finally, the circumstances giving rise to a bonus in the actual would likely exist in the but-for world as well, and so would simply remain constant. For instance, if a hospital was willing to pay a particular temporary nurse extra (in the form of a bonus) relative to other nurses, then that same nurse would be paid more in the but-for world too, relative to other nurses.

B. The CPI Is the Best Method for Comparing Bill Rates in One Year to Bill Rates in the Next Year

50. In my initial report, I compared the average (and individual) per-diem billing rates for various specialties in 1996 (the last rates available before the Class Period) to the first AzHHA uniform rates during the Class Period, in 1997. I performed a similar comparison with the billing rates at the end of the uniform rate-setting period, between 2005 and 2006 rates. I compared the rates both in dollar or "nominal" terms, and in inflation-adjusted or "real" terms. Adjusting for inflation is a standard economic practice designed to compare apples to apples—in

95. *Scheffman Report*, ¶ 109.

this case, to correctly compare a nurse's purchasing power, or "real" wage, in 1996 to that nurse's real wage in 1997.

51. Dr. Scheffman [redacted][96] The purpose of the CPI adjustment was merely to compare hourly billing rates from 1996 to 1997 in real terms. The proof of common impact lies in the combination of several types of complementary common evidence and analysis, which I addressed in my original report. *First*, real billing rates fell from 1996 to 1997, both on average and agency by agency. *Second*, rates fell in the context of a nursing shortage, which defies economic theory and common sense. *Third*, population and other demographic trends were tending towards further shortage, not towards ameliorating it. Examining this combination of factors is more reliable than considering a single benchmark.

52. Moreover, as I demonstrate below, the benchmarks that Dr. Scheffman proposes do not support his conclusions.

1. The CPI Is the Best Available Inflation Adjustment Factor

53. The Bureau of Labor Statistics (BLS) maintains a variety of possible inflation adjustments to help compare purchasing power from one year to the next. However, the one that most closely measures consumer purchasing power is the CPI, based on a survey of the prices of a fixed set of goods around the country. The BLS calculates a variety of versions of the CPI, including local versions. For the time period 1996-1997, only two relevant versions are available: (1) the CPI for all Urban Consumers in the United States and (2) the CPI for all Urban Consumers in the western region of the United States. The CPI for the entire U.S. rose by 2.3 percent between 1996 and 1997, and the CPI for the western United States rose by 2.4 percent.

96. *Id.* ¶ 129.

The Western U.S. would perhaps have been more specific to Arizona, but to be conservative, I used the 2.3 percent national inflation figure.[97]

2. Dr. Scheffman Conflates Inflation Adjustments with the Creation of a But-For World

54. Dr. Scheffman has incorrectly framed my inflation adjustments as the creation of a but-for world. The CPI allows a comparison of rates in different years; a comparison which illustrates that, in the midst of a severe nursing shortage, rates went *down* after Defendants implemented their rate-fixing in 1997.

55. The most salient contextual element is the nursing shortage, which I discussed in my initial report,[98] and which was recognized by AzHHA staff and the AzHHA board.[99] For billing rates to fall in a time of a severe nursing shortage is contrary to economic logic; it is also strong evidence that the market was not competitive. The demographic context is also relevant. If broad demographic trends indicate that population relative to nurses is increasing, a competitive explanation becomes less likely. Table 1 presents data on the number of nurses per capita in Arizona.[100]

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97. CPI Databases, *available at* http://www.bls.gov/cpi/#data (last accessed May 18, 2009).

98. *Singer Report*, § IV.A.

99. *See* Scott Deposition, at 26-28 (nursing shortage has continued since the early 1990s); Tovar Deposition (HT), at 44-45 ("we're in a nursing shortage and there's just not enough nurses to go around."); at 106-107 (same) (AzHHA staffing coordinator); Deposition of Billie Lent (HT), at 80 ("There's a significant nursing shortage, absolutely") (director of staffing for Banner Health); Deposition of Leslie Minjarez (HT), at 12, 50-51 [redacted] (coordinator of nursing community outreach for Carondelet Health Network); Deposition of Herbert Joseph Geary (HT), at 11, 15, 18 (nurses in Arizona are "a scarce resource") (former chief nursing officer for Banner Health); CHN-AZ-023949 (minutes of Jan. 26, 2001 meeting of AzHHA Service Corp, board of directors, stating that "there is a critical shortage of nurses and demand is so high."); CHW-S000696 [redacted] (HT Ex. 24). *See also* AzNR194252 [redacted] (HT Exhibit 227).

100. National Sample Survey Results, 1992-2000.

TABLE 1: ARIZONA NURSES PER CAPITA

Year	Total Nurses	Employed in Nursing	Total nurses per 100,000 population	Employed per 100,000 population
1992	32,988	27,093	861	707
1996	40,313	31,913	911	721
2000	42,658	32,222	831	628

Source: National Sample Survey

Table 1 shows that the number of employed nurses per 100,000 population increased between 1992 and 1996, but decreased sharply between 1996 and 2000. It is not entirely clear why this occurred, but it may be due to migration patterns: Arizona's population increased by 30.4 percent between 1990 and 1999, with over half of that increase owing to migration from elsewhere in the United States.[101]

56. Regardless of the cause, the demographic trends point toward potentially serious shortages, especially from 1996 onward, and are simply not consistent with a *decrease* in nurses' real wages if the market were competitive. Dr. Scheffman fails to address this economic context anywhere in his report.

3. Dr. Scheffman's Proposed Benchmarks Are Flawed

57. Dr. Scheffman suggests several alternative, but ultimately flawed, benchmarks to compare with the changes in rates at the beginning and end of the conspiracy, including: [redacted] and (2) growth rates of AzHHA-determined bill rates during the Class Period. I address each of these in turn.

101. Census Bureau, State Population Estimates and Demographic Components of Population Change 1990-1999, available at http://www.census.gov/popest/archives/1990s/ (last accessed May 19, 2009). The age profile of Arizona's population remained roughly constant; Arizona's population of 65-and-older persons increased by 30.8 percent. *See* Selected Age Groups by Sex 1990-1999, *available at* http://www.census.gov/popest/archives/1990s/ (last accessed May 19, 2009).

a. Health Temp Agency Rate Increases Before the Class Period

58. Dr. Scheffman [redacted] [102] As a preliminary matter, there is evidence, as discussed, that AzHHA hospitals were discussing rates before 1997. Accordingly, rate changes from earlier years may well have been affected by such conduct. More generally, as Dr. Scheffman reaches further back in time (to 1990 for example) for a benchmark, he increases the chances that the prior period differs from the period at issue, so that the earlier period no longer can be used as a valid benchmark. Even setting aside any potential effect owing to the challenged conduct, economic conditions may be quite different. The economy could move from economic recession to expansion, for instance. Migration may change demographic factors substantially, shifting supply and demand over a long time horizon. New competitors may enter the market and incumbent firms may exit.

b. Change in AzHHA Uniform Rates during the Class Period

59. Dr. Scheffman attempts to [redacted] [103] His conclusion is that [redacted] [104] It is not clear why he [redacted]

102. *Scheffman Report*, ¶¶ 131-136.
103. *Id.* ¶¶ 172-175.
104. *Id.* ¶ 175 [redacted]

[redacted]. His explanation is that [redacted] [redacted][105]

60. His analysis, however, attempts to [redacted] [redacted] The present national economic crisis offers a perfect example. Dr. Scheffman has used [redacted] But over the year between March 2008 and March 2009, unemployment in Arizona rose sharply from 4.7 to 7.8 percent.[106] This increase in joblessness (and the current national economic crisis) could have a variety of effects on temporary nurse wages that would not have been present in the but-for world. For example, hospitals may be facing less demand owing to economic conditions and may be using fewer temporary nurses.

61. Also, aside from its fundamental errors in design, Dr. Scheffman's analysis also ignores key data. In Table 33 of his report, reproduced below as my Table 2, Dr. Scheffman [redacted] During his deposition, Dr. Scheffman [redacted].[107] Including the first year (the first year of Defendants' setting of standardized rates) has a significant effect on Dr. Scheffman's results. Below I reproduce Table 33 from Dr. Scheffman's report.

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105. *Id.* ¶ 173.

106. *See* Bureau of Labor Statistics-Local Area Unemployment Statistics by State, *available at* http://data.bls.gov/PDQ/servlet/SurveyOutputServlet?data_tool=latest_numbers&series_id=LASST04000003 (last accessed May 31, 2009).

107. Scheffman Deposition, at 232: 3-15 [redacted]

[redacted]

62. Next, I present the same table—[redacted]

[redacted]

[redacted]

The inclusion of the 1997 (negative) growth rates makes a substantial difference to the conclusions from the table. In particular, Dr. Scheffman's [redacted][108] [redacted].

63. Regarding my analysis of the change in rates from 1996 to 1997, Dr. Scheffman incorrectly suggests that [redacted] However, in footnote 63 (reproduced here) of my initial report, I stated that:

> $32.66 is the mean of prices charged by agencies participating in AzHHA. The range was $30.50 to $35.20. It bears emphasis that after adjusting for inflation, the lower end of this range is $31.20. According to the Bureau of Labor Statistics, price levels rose 2.29 percent from 1996 to 1997. The 1996 rate of $30.50 in 1997 dollars is thus $31.20. *See* CPI Inflation Calculator, *available at* http://data.bls.gov/cgi-bin/cpicalc.pl. *Accordingly, the rate set by AzHHA in its first year of uniform rate determination appears to be less than the lowest rate of any participating agency immediately before AzHHA's uniform rate determination.*[109]

The last line from the footnote is unambiguous: When the bill rate charged by each individual agency in 1996 (adjusted for inflation) is compared with the AzHHA-determined bill rate in 1997, the common impact of defendants' conduct on every agency is revealed. Dr. Scheffman's claims to the contrary are incorrect.

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108. Upon replication, the "Average 3 year Growth Rate" turns out to be the 3-year growth rate that, if compounded over an eight year period, would equal overall growth over the period 1997-2006.

109. *Singer Report*, ¶ 41 n. 63 (emphasis added).

C. Dr. Scheffman Ignores Evidence of AzHHA Enforcement Activity against AzHHA-Member Hospitals

64. An effective cartel must have a means to detect and punish members who attempt to deviate from the price fixed by the cartel.[110] Dr. Scheffman claims that [redacted] [111]

65. Dr. Scheffman, however, ignores relevant evidence that clearly shows AzHHA administrators had mechanisms in place to both detect and punish deviation from the program, and to maintain AzHHA-member-hospital purchases at monopsony levels.

1. Dr. Scheffman Asserts without Evidence That Member Hospitals Deviated from AzHHA Standard Bill Rates

66. As discussed, Dr. Scheffman cites nothing that would prove that AzHHA hospitals paid AzHHA agencies rates that differed substantially, or at all, from the standardized rates.

110. *See*, *e.g.,* DENNIS CARLTON & JEFFREY PERLOFF, MODERN INDUSTRIAL ORGANIZATION at 216-17 (Harper Collins, 1990); George Stigler, *A Theory of Oligopoly*, J. POL'Y ECON. (1964); ANDREW GAVIL, WILLIAM KOVACIC, & JONATHAN BAKER, ANTITRUST LAW IN PERSPECTIVE: CASES, CONCEPTS AND PROBLEMS IN COMPETITION POLICY at 220-36 (Thomson West, 2002).

111. *Scheffman Report*, ¶¶ 73, 75-76.

2. Dr. Scheffman Ignores Evidence of the Monitoring and Punishment of Member Hospitals that Purchased a Significant Volume of Nurse Hours from Non-Contract Agencies

67. Dr. Scheffman classifies [redacted][112] He further states that [redacted][113]

68. Given the backdrop of the overall nursing shortage in Arizona during the Class Period,[114] it is not surprising that demand for per diem and travelling nurses would at times exceed the supply made available through AzHHA agencies.[115] AzHHA executives understood this reality. Thus, the goal of AzHHA contracts was to direct that AzHHA-member hospitals fill open positions through AzHHA-member agencies first (at the AzHHA-determined hourly bill rate), and hire nurses from non-participating agencies only when it was clear that additional nurse hours were required.[116] As such, Dr. Scheffman's claim that [redacted][117] What is important is that AzHHA controlled and suppressed the rate for participating agencies, and that

112. *Id.* ¶ 75 [redacted]

113. *Id.* [redacted]

114. Kahn Deposition (HT), at 92: 13-15. [redacted]

115. *Id.* at 52:17-23 [redacted]

116. *Id.* at 123: 21-25 [redacted] HT Exhibit 4 (HT00031-34) at 31 [redacted] HT Exhibit 37 (CG00487-89) at 489 [redacted]

117. *Scheffman Report*, ¶ 76 [redacted]

AzHHA took steps to ensure that AzHHA hospitals would minimize or reduce their purchases from non-AzHHA agencies.

69. There is ample evidence that [redacted] [118]

70. Once again, Dr. Scheffman ignores critical record evidence. To [redacted] AzHHA Executive Vice President Becky Kahn presented [redacted] [119] [redacted] [120]

71. [redacted] [121] By mid-2002, AzHHA had adopted a standard by which participating facilities in the Northern Local Per Diem Registry had to maintain a contract agency to non-contract agency ratio of 50 percent or higher. Those facilities that did not meet this threshold were given 30 days to increase their ratios to above 50

118. HT Exhibit 32 (CHW-S000626-630) at 626-27 [redacted]

119. HT Exhibit 28 (CHW-S000614-18) at 615.

120. Exhibit 713 (AzNRCA019066-75) at 72. [redacted]

121. HT Exhibit 28 (CHW-S000614-18) at 615-16.

Case 2:07-cv-01292-SRB Document 381-1 Filed 06/23/09 Page 41 of 72

percent, or risk expulsion from the program.[122] [redacted]"[123]

72. [redacted][124] This process of "naming names" would allow hospitals to pressure each other into compliance. Furthermore, the hospitals that were compliant could worry less about other hospitals not complying. This is exactly the type of compliance mechanism that increases the effectiveness of price-fixing cartels.

73. The responses of the hospitals show [redacted][125] [redacted]"[126] [redacted]"[127] [redacted][128] [redacted]

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122. HT Exhibit 37 (CG00488-89) at 488. *See* also Scott Deposition, at 254: 7-15. ("Q: Sure. The point of AzHHA being able to kick hospitals out for not using AzHHA contract agencies was to stimulate or encourage the hospitals to stop using non-contract agencies and start using contract agencies, correct? A: Yes.") (objection omitted).
123. HT Exhibit 36 (CG00486).
124. HT Exhibit 37 (CG00488-89). [redacted]
125. *Id.* at 488.
126. Kahn Deposition (HT), at 151: 16-18.
127. *Id.* at 152: 16-21.
128. *Id.* at 152: 25, 153: 1-3.

[redacted] [129] [redacted]

[redacted] [130]

3. Dr. Scheffman Ignores Evidence That AzHHA Successfully Organized a Boycott of Cross Country

74. Dr. Scheffman also ignores evidence that AzHHA sought to punish participating agencies that sought to charge higher rates. In 1998, [redacted] [131]

75. [redacted] Ms. Kahn wrote that:

[redacted] [132]

[redacted] [133]

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129. *Id.* at 151: 8-13. [redacted]

130. *Id.* at 150: 5-8. [redacted]

131. HT Exhibit 8 (AzNR123436), at 436; HT Exhibit 9 (AzNR123428-429), at 428. HT Exhibit 10 (AzNR123426-427), at 426.

132. HT Exhibit 8 (AzNR123436), at 436.

133. HT Exhibit 10 (AzNR123426-427), at 427.

76. [redacted]

[redacted][134]

In her deposition, Ms. Kahn [redacted][135] [redacted][136] [redacted][137] [redacted][138] This [redacted]

134. HT Exhibit 9 (AzNR123428-429) at 428.

135. Kahn Deposition, at 110: 22-25, 111: 1-12 (referencing Exhibit 695) [redacted]

136. HT Exhibit 11 (AzNR132434). [redacted]

137. HT Exhibit 9 (AzNR123428-429) at 428 [redacted]

138. HT Exhibit 12 (AzNR06945) [redacted]

[redacted]. [139]

IV. IMPACT OF DEFENDANTS' CONDUCT ON CLASS MEMBERS

77. Dr. Scheffman suggests that even if Defendants' conduct and agreements suppressed bill rates, evaluating the associated effect on Class members would require individualized analysis. I disagree. The amount of damage may differ as between Class members, but the *fact of damage would still exist for all or nearly all, and may be analyzed and demonstrated using methods and evidence common to the Class.* Wages paid to temporary nurses are plainly related to bill rates—the higher the bill rate, the more the agencies can pay the nurses while still earning their own profit and covering expenses. Moreover, competition between agencies during a nursing shortage would mean that had bill rates been higher, the wages of all or nearly all nurses would have been higher, because agencies that sought to "capture" the entire bill rate increase would lose nurses to agencies that increased pay.[140]

78. AzHHA-member agencies paid nurses a portion of the bill rates they collected from AzHHA-member hospitals. Not all agencies paid the same proportion of bill rates to nurses. However, as Dr. Scheffman himself has written, members of a proposed class do not need to be compensated identically to demonstrate common impact.[141] Class-wide analysis is appropriate if

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139. Kahn Deposition, at 128: 23-25, 129: 1-15 [redacted]

140. *Singer Report*, ¶ 40.

141. *See* David Scheffman, Economic Analyses Relevant to Class Certification, Law Seminars International, Litigating Class Action Suits, May 10, 2007, at 7 ("Non-uniform products and pricing, however, are not, alone, generally sufficient to defeat class certification. A number of courts have found it appropriate to certify classes . . . where prices across products or across purchasers are highly variable and even in circumstances where prices are negotiated individually with proposed class members. In certain of these circumstances, courts have found that even

prices (in this case, wages) are based on a common mechanism that was depressed—a "base price."[142] In this case, the "base price" is the AzHHA-determined bill rate.

A. Compensation Is Correlated with Bill Rates

79. Dr. Scheffman relies on anecdotal evidence from certain agency interviews to show that agencies do not necessarily have *identical compensation schemes*. I have not claimed otherwise. The agencies do not need to have identical pay systems or policies for suppression in bill rates to have injured all or nearly all temporary nursing personnel.

80. In my initial report, I cited evidence that [redacted] [143] Since then, additional data have become available through discovery from several additional AzHHA-member agencies that [redacted]. I have analyzed the correlation between bill rates and pay rates for RN-Specialty, RN-Non-Specialty, RN-Telemetry, CNA, ORT, and LPN per diem and travel nurses for all available years at five additional AzHHA-member agencies: [redacted].[144] For each category within each particular agency, [redacted] [145] Although the portion of increases

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though there is tremendous variation in prices across customers, the prices are based on some common pricing mechanism—a 'base' price.").

142. *Id.*

143. *Singer Report*, ¶ 40.

144. These five agencies provided electronic payroll data including bill rates and pay rates by individual nurse/assignment. [redacted] data production; [redacted] data production; [redacted] data production; [redacted] data production; [redacted] data production.

145. [redacted]

in bill rates realized by temporary nursing personnel may vary between AzHHA-member agencies, the important point is that at all the agencies, *the higher the bill rate, the higher the pay for the nurse*.

2. Agency Interviews and Declarations Show That Wages Moved With AzHHA Rates

81. Dr. Scheffman cites [redacted]

82. Dr. Scheffman lists a [redacted] He states [redacted].[146] For example, Dr. Scheffman makes [redacted] Dr. Scheffman states that, [redacted]"[147] He also claims that [redacted]"[148] Additionally, he claims that [redacted]"[149] Based on these

146. *Scheffman Report*, ¶¶ 197-202.
147. *Id.* ¶ 201 (citing Declaration of [redacted] July 28, 2008, ¶¶ 4, 5).
148. *Id.* ¶ 199 (citing Declaration of [redacted] July 28, 2008, ¶ 4).
149. *Id.* ¶ 197 (citing Declaration of [redacted] ¶¶ 12, 14; Declaration of [redacted] ¶ 7; Declaration of [redacted] ¶ 14; Declaration of [redacted] ¶ 14; Declaration of [redacted] ¶ 17).

examples and others like them, Dr. Scheffman [redacted]

83. [redacted]

[redacted][150]

[redacted]

[redacted][151]

84. [redacted]

[redacted]

[redacted][152] [redacted]

[redacted]

[redacted]

3. Wages as a Percentage of Billing Rates Need Not Be Identical for Impact to Be Analyzed on a Class-Wide Basis

85. Dr. Scheffman [redacted]

[redacted][154] It is worth reiterating that, to demonstrate class-wide

150. Second Declaration of [redacted] May 14, 2009, ¶¶ 5-6 (emphasis added).
151. *Id.* ¶ 7.
152. *Scheffman Report*, ¶ 199 n. 100, ¶ 201 n. 112.
153. Second Declaration of [redacted] Apr. 29, 2009, at 1.
154. *Scheffman Report*, ¶¶ 188-196.

impact, it is not necessary to establish that agencies were identical or that similar Class members were paid identical wages. Nor is it necessary for wages to be determined in identical ways. The important issue is whether, had the bill rates been increased, *some fraction of that increase would redound to the benefit of Class members.*

B. Competitive Pressure Prevents Agencies from Wholly Capturing Increases in Billing Rates

86. Dr. Scheffman incorrectly claims that [redacted] [155] [redacted]

87. [redacted] [156] [redacted] [157]. [redacted] [158]

155. *Id.* ¶ 188 [redacted]

156. Declaration of [redacted], Nov. 7, 2008, ¶ 9.

157. Declaration of [redacted] Oct. 16, 2008, ¶ 8 [redacted]

88. Dr. Scheffman and his staff also [redacted]. According to Dr. Scheffman's [redacted][159] [redacted]"[160] In an interview with a representative from [redacted][162] [redacted]

89. Defendants plainly understood that increases in bill rates resulted in higher wages paid to temporary nursing personnel. Recall the [redacted][163] [redacted]

158. *See* [redacted]

159. [redacted] (DTS00071-76), at 74 [redacted] (DTS00196-202), at 201.

161. [redacted] (DTS00180-186), at 184.

162. *Id.*

163. *See* Exhibit 710 (AzNRCA040035-59) at AzNRCA040039 [redacted]

[redacted].[164] [redacted] This allowed non-contract agencies to "Raise RN Pay Rates." The fact that increased bill rates lead to higher nurse wages was a reality familiar to AzHHA administrators, hospitals, and agencies alike.

C. Dr. Scheffman's Analysis of Bonuses Does Not Undermine Proof of Impact

90. As discussed, Dr. Scheffman, in his report, claimed that [redacted].[165] But at his deposition, Dr. Scheffman [redacted] Dr. Scheffman then claims that [redacted][166] Even if that were so, it is beside the point. As I discussed above, there is ample evidence showing that Defendants colluded via direct communications to lower the bonuses paid to Class members.[167] Moreover, whatever a particular Class member's bonus, the Class member's hourly compensation would still have been higher had *bill rates* been higher.

V. MARKET DEFINITION

91. In this section, I respond to Dr. Scheffman's claims that [redacted]

164. Kahn Deposition, at 85: 13-24 (discussing Exhibit 695). [redacted]

165. *Scheffman Report*, ¶ 108 [redacted]

166. *Id.* ¶¶ 109-117.

167. *Singer Report*, ¶¶ 35-37 (showing, among other things, that AzHHA expressly recommended to the hospitals that they cap bonuses at $1,000, despite acknowledging that bonuses in other states had reached $5,000).

[redacted][168] As a preliminary matter, I understand from the Court's opinion regarding Defendants' Motion to Dismiss that the alleged violation here may be deemed a *per se* antitrust violation, in which case no relevant market need be defined.[169] Moreover, I understand that expert reports on the merits are not yet due, and even Dr. Scheffman acknowledges that he has not reached any conclusions on relevant market, nor has he performed an actual relevant market analysis. For this reason alone, his discussion of market definition is largely beside the point.

A. Given the Direct Evidence of Antitrust Impact, It May Not Be Necessary to Define a Market

92. There is abundant evidence, discussed in my original report and reiterated above, that Defendants here had power over price—that is, they could control the rates for temporary nursing personnel in Arizona.[170] As I stated in my initial report, in light of such evidence, it may not be necessary, as an economic matter[171] nor as a legal matter, as I understand it,[172] for a "relevant market" to be formally defined. Dr. Scheffman ignores this direct evidence. Moreover, as I understand it, even if Defendants later submit a traditional market-definition analysis, it does

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168. *Scheffman Report*, ¶ 214.

169. Order on Motion to Dismiss, March 19, 2009, at 7 ("For the purposes of this Motion, Plaintiffs have alleged facts sufficient to support a claim of per se illegality.").

170. *Singer Report*, ¶ 66 ("Despite increasing its nurse rates modestly in 2003, for example, AzHHA still advertised 'savings' to its member hospitals of $10 an hour compared to non-AzHHA temporary nurse agencies.") (citing to CHW-S000607 "Row four provides an estimate of what the non-contract RN agency usage is costing your organization using an average billing rate of $57 per hour . . . Please note that the average RN bill rate through the Registry Program, if using contract agencies, is $47 per hour.").

171. *See, e.g.,* Aaron S. Edlin & Daniel L. Rubinfeld, *Exclusive or Efficient Pricing? The Big Deal Bundling of Academic Journals*, 72 ANTITRUST L. J. 119, 126 (2004) ("Market definition is only a traditional means to the end of determining whether power over price exists. Power over price is what matters. As is stated in the Areeda, Elhauge, and Hovenkamp treatise, cases such as Microsoft, and the Areeda, Kaplow, and Edlin casebook, if power can be shown directly, there is no need for market definition: the value of market definition is in cases where power cannot be shown directly and must be inferred from sufficiently high market share in a relevant market.")

172. *See* FTC vs. Ind. Fed'n of Dentists, 476 U.S. 447, 460-61 (1986) (noting that "'proof of actual detrimental effects, such as reduction of output,' can obviate an inquiry into market power, which is but a 'surrogate for detrimental effects'" (quoting 7 PHILLIP E. AREEDA, ANTITRUST LAW ¶ 1511, at 429 (1986))).

not mean that Plaintiffs are required to do so as well, if direct evidence of anticompetitive effects is available (as it is here).

93. Additionally, Dr. Scheffman ignores the crucial structure of the conduct and agreement here. Defendants' power over price stemmed from their use of the common price-averaging mechanism that set standardized rates affecting every member of the Class. The same rate-setting mechanism was used for per diem and travel nurses, for registered nurses, LPNs, and all other categories of temporary personnel identified in the Registry agreements themselves.[173] Dr. Scheffman cites no contemporaneous documents or analyses by any Defendant suggesting that the alleged complexities he discusses in his report actually existed or affected Defendants' conduct. Therefore, proof that the rates set using this mechanism were below the competitive level *is* proof that AzHHA and Defendants had the market power to set below-competitive rates for every member of the Class. For example, the AzHHA savings documents, which report AzHHA's calculations of the savings accrued by member hospitals, describe the savings as accruing across all the categories placed through the Registry.[174] Other evidence of impact likewise shows that the common mechanism affected the entire Class.

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173. Memo to Southern Region: HT Exhibit 2 (AzNR132778-782), at 778; Memo to Northern Region: HT Exhibit 3 (AzNR168845-849), at 845; Memo regarding traveler nurses: HT Exhibit 7 (AzNR132966-970) at 966. Although Kahn's memo regarding traveler rates is dated April 1998, the memo notes that rates were set via hospital survey responses beginning in 1997: ("For the first time last year, we conducted a rate survey with participating organizations in order to establish rates for the traveling program. We will be continuing the process for this upcoming contract.").

174. *See, e.g.,* CHW-S000606-CHW-S000610 at 610 (a January 2002 report to St. Joseph's Hospital and Medical Center calculating the quarterly savings to the hospital by multiplying AzHHA's calculation of savings ($10) by the total hours billed in all temporary categories).

B. Dr. Scheffman did not Conduct a Market-Definition Analysis Himself

94. Dr. Scheffman himself does not offer any conclusions on relevant market. He admitted during his deposition that he [redacted]"[175] [redacted] [176] Dr. Scheffman attempts to blur this issue in his report by including a laundry list of speculations about possible submarkets and making misleading statements implying that individual issues might make a difference in the definition of relevant markets.

C. Dr. Scheffman's Concerns about the Alleged Complexity of Market Definition Were Not Shared by AzHHA

95. Up to the 1997-1998 Registry contract, [redacted].[177] Contrary to Dr. Scheffman's suggestions, AzHHA [redacted] [178] Around the time of the 1997-1998 contract, AzHHA apparently changed its approach. Becky Kahn, the director of the Registry Program at the time, wrote to the participating facilities, stating:

> I met with legal counsel last week and we are going to measure the market differently and see if we can make room to add some additional facilities. We will be comparing the number of licensed personnel currently employed or contract [sic] with by our participating members with the number of licensed personnel in the state.[179]

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175. Scheffman Deposition, at 233: 7-18 [redacted]

176. *Id*. at 234.

177. Kahn Deposition (HT), at 34: 12-17 [redacted]

178. *Scheffman Report*, ¶ 214.

179. HT Exhibit 2 (AzNR132778-AzNR132779) (March 1997 Memo from Becky Kahn to Participating Facilities in Southern Arizona).

Ms. Kahn testified in her deposition that [redacted][180] [redacted].[181] Presumably, using numbers of licensed professionals would have made Defendants' market power appear lower.

96. Finally, again assuming this kind of analysis were ultimately needed, I note that the Department of Justice compared the number of hospital beds within AzHHA to the number of hospital beds in Arizona,[182] and used two groupings (travel and per diem).

D. Market Definition Analysis at the Merits Stage, Even If Needed, Would Turn Entirely on Common Methods and Evidence

97. In my Class Certification Report, I discussed the methods that I would employ to determine the relevant market or markets, calculate market share, and make inferences about market power, if such an analysis were eventually deemed necessary.[183] The necessary inputs to these methods, such as *industry* elasticities of demand or supply, are all market characteristics, not individual characteristics. Even if, as Dr. Scheffman argues, [redacted]

180. Kahn Deposition, at 67:16-69:7 [redacted]

181. HT Exhibit 4 (HT00031-34) [redacted]

182. *See* Department of Justice Competitive Impact Statement, at 5-6.

183. *Singer Report*, § VI.

[redacted][184][redacted]

[redacted] hardly constitutes individualized analysis. Simple, clearly defined categories such as these are based on market-level evidence and may be analyzed within a class-wide analysis. This is especially true when the mechanism through which power over price is wielded is common to the class.

98. Finally, Dr. Scheffman incorrectly claims that [redacted]

[redacted][185] This is both misleading and incorrect. The number of hours of different types of nurses placed through the various registries has nothing to do with the important variables in a market-definition analysis. In a buyer power analysis, the key economic variables are own- and cross-price *industry* elasticities of supply**.**

99. For all of the reasons above, I fundamentally disagree with Dr. Scheffman's analysis of the market definition and market power issues in this case. I continue to believe that a market definition exercise most likely will be unnecessary in this case as an economic matter, given the abundant direct evidence of anticompetitive effects resulting from Defendants' conduct. And even if such an exercise were necessary, the analysis would be completely amenable to common methods and evidence.

VI. DAMAGES

100. Much of the criticism that Dr. Scheffman levels against my damages models is perfunctory and irrelevant.

184. *Scheffman Report*, ¶ 214.
185. *Id.* ¶ 217.

A. NEIO Model

101. Dr. Scheffman argues that [redacted] [186] Dr. Scheffman fails to explain, however, that the NEIO model estimates the average price level in the but-for world. In combination with the above evidence on pay rates, this is precisely the information that is required to estimate aggregate damages to the class. Therefore, the NEIO model is an appropriate tool to use in this matter.

102. *First*, Dr. Scheffman's critique of the NEIO model fails to acknowledge its wide-spread use within the economic literature. Dr. Scheffman cites to [redacted] [187] but numerous researchers support the model. The NEIO model lends itself to several applications in antitrust litigation, including the measurement of buyer power and the calculation of damages.[188] Research on the NEIO model dates back to the work of former U.S. Department of Justice Chief Economist Dr. Timothy Bresnahan, who used the NEIO approach to study the effect of concentration on the aluminum industry.[189] Dr. Bresnahan described the use of the technique in the widely used *Handbook of Industrial Organization*,[190] which is a popular desk reference among applied economists. Since that time, the NEIO model has been relied upon by many applied economists to calculate market power and market conduct in a host of different

186. *Id.* ¶ 251.

187. *Id.* n. 129 (citing Professor Kenneth S. Corts's 1999 critique of the NEIO model that was published in Journal of Econometrics). *See* Kenneth S. Corts, *Conduct Parameters and the Measurement of Market Power*, 88 J. ECONOMETRICS 227-250 (1999) [hereinafter *Conduct Parameters and Market Power*].

188. *See*, *e.g.*, Jonathan B. Baker & Daniel L. Rubinfeld, *Empirical Methods in Antitrust Litigation: Review and Critique*, 1 AM. L. & ECON. REV. 386, 427-29 (1999).

189. Timothy F. Bresnahan & Valerie Y. Suslow, *Oligopoly Pricing with Capacity Constraints*, 15/16 ANNALES D'ECONOMIE ET DE STATISTIQUE 267-89 (1989).

190. Timothy F. Bresnahan, *Empirical Methods for Industries with Market Power*, in 2 HANDBOOK OF INDUSTRIAL ORGANIZATION (Richard Schmalensee & Robert Willig eds., North Holland 1989).

industries.[191] Dr. Scheffman's failure to adequately explain the widespread use of the NEIO model highlights the inadequacy of his objections to its use in this matter.

103. *Second*, as I stated above, Dr. Scheffman failed to explain that published economic research has refuted Corts's work on the NEIO model, on which Dr. Scheffman bases his critique of that model. In particular, Professors David Genesove and Wallace P. Mulling found that the NEIO model performed admirably in calculating market conduct.[192] Furthermore, they found that the performance of the NEIO model was robust to different specifications of the demand model.[193] Finally, the authors noted that to the extent that the NEIO model miscalculated conduct, it was a conservative estimator of market power.[194]

104. *Third*, Dr. Scheffman fails to adequately explain Dr. Corts's criticism of the NEIO model. Dr. Corts's objection to the use of the NEIO model was due to its *inability to detect market power when it existed*.[195] Therefore, Dr. Scheffman's criticism of my proposed use of the NEIO amounts to an objection to the use of a model that *may be too conservative in its calculation of damages*. Consequently, Dr. Scheffman's criticisms of my proposed damage methodology utilizing the NEIO approach are entirely without merit.

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191. *See, e.g.,* R. N. Rubinovitz, *Market Power and Price Increases for Basic Cable Service Since Deregulation*, 24 RAND J. ECON. 1-18 (1993); Sanjib Bhuyan & Rigoberto A. Lopez, *Oligopoly Power in the Food and Tobacco Industries*, 79 AM. J. AGR. ECON. 1035-43 (1997); Sanjib Bhuyan & Rigoberto A. Lopez, *Oligopoly Power and Allocative Efficiency in the U.S. Food and Tobacco Industries*, 49 J. AGR. ECON. 434-442 (2008); Karen Clay & Werner Troesken, *Further Tests of Static Oligopoly Models: Whiskey 1882-1898*, 51 J. INDUST. ECON. 151 (2003) (finding that although the conduct parameter was overestimated in their dataset, the error was small and was improved with knowledge of when the conduct either began or ended, which is present in this case).

192. David Genesove & Wallace P. Mullin, *Testing Static Oligopoly Models: conduct and cost in the sugar industry, 1890-1914*, 29 RAND J. ECON. 355, 355-377 (1998). An astute reader might note that Genesove and Mullin's paper was published *before* Corts's work that they refute. This is because Corts had distributed a working paper with his results and conclusions before his paper was ultimately published. Therefore, Genesove and Mullin were responding to Corts's working paper. *See id.* at 356, 376.

193. *Id*. 375-76.

194. *Id*. (stating that the NEIO did, minimally, underestimate the conduct parameter).

195. Corts, *Conduct Parameters and Market Power, supra*, at 245 ("In particular, if the observed equilibrium behavior results from efficient supergame collusion, the estimated conduct parameter underestimates the degree of market power if demand shocks are not fully permanent, and may fail to detect any market power whatsoever when demand shocks are completely transitory, even if average price-cost margins are near the monopoly level.").

B. Benchmark Model

105. Dr. Scheffman makes three criticisms of my benchmark model. *First*, he states that [redacted] [196] This criticism, however, only addresses the survey's applicability to a portion of the Class. Furthermore, to the extent that the economic factors affecting non-RN rates are similar to those affecting RN rates, then *changes* in RN rates would be similar to *changes* in non-RN rates. Consequently, Dr. Scheffman's criticism is either invalid or overreaching.

106. *Second*, he claims that [redacted]. [197] Specifically, he faults the use of 37 [redacted] What Dr. Scheffman failed to explain, however, was that the average rates of those 37 observations match well with the data from other states. In particular, the mean rate of the 37 observations that Dr. Scheffman alludes to is 24.5 and the mean rate of the 240 observations for per diem nurses in other states is 24.9, which is statistically similar to 24.5 at any reasonable level of confidence. Therefore, the mere fact that 37 observations are available for analysis in nearby states in 1996 does not cast doubt on the integrity of the data.

107. *Third*, he claims [redacted] [198] Specifically, Dr. Scheffman states that [redacted] Although Dr. Scheffman is correct in this point, he fails to explain that the results of this question—question 24 in the 2004

196. *Scheffman Report*, ¶ 237.
197. *Id.* ¶ 238.
198. *Id.* ¶ 239.

survey—were lumped together into larger categories.[199] As such, nurses that identified themselves as travelers were grouped into a "staff or general duty nurse" category when the survey results were published.[200] Specific details on a separate category of travel nurses are therefore unavailable in the 2004 survey, and I therefore controlled for travel nurses similarly to other surveys—that is, by removing nurses that hold permanent residences in states different from their current work states.

C. Bidding Model

108. Dr. Scheffman lists three main criticisms in the use of bidding models for the estimation of damages. *First*, he claims that a [redacted]"[201] [redacted].[202] *Second*, he states [redacted]"[203] [redacted]"[204] *Third*, he [redacted] [205] As I explain below, these critiques are either misguided or overstated.

109. Dr. Scheffman's first critique—[redacted]—is contradicted by the evidence in this case. In particular, AzHHA did in fact collect information from hospitals on what they wished to pay

199. *See* BUREAU OF HEALTH PROFESSIONALS, HEALTH RESOURCES AND HUMAN SERVICES, THE NATIONAL SAMPLE SURVEY OF REGISTERED NURSES 2004: DOCUMENTATION FOR THE COUNTY PUBLIC USE FILE, at C-14, C-15 (2004).

200. *Id.* (identifying the staff or general nurse category as responses numbered 5, 9, 26, 29, 30, 33, and 34) These response numbers correspond to nurses declaring themselves as "Charge Nurse," "Float Nurse," "Public Health Nurse," "School Nurse," "Staff Nurse," "Team Leader," and "Traveling Nurse." *See* U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES, 2004 NATIONAL SAMPLE SURVEY OF REGISTERED NURSES, at 7 (2004).

201. *Scheffman Report*, ¶ 245.

202. *Id.*

203. *Id.* (emphasis in original).

204. *Id.* ¶ 246 (emphasis in original).

205. *Id.* ¶ 247.

(and surveyed agencies). Although the mechanism here was anticompetitive, the use by Defendant hospitals of a central agent would be a feature of a competitive bidding model. Therefore, the bidding analyses that I discussed in my initial report is a plausible "but for" alternative in a competitive marketplace.

110. Dr. Scheffman's second criticism, that [redacted]"[206] [redacted] is incorrect. To estimate parametrically hospital demand, all that is required is data on variables that affect hospital demand. These data would reflect such factors as hospital beds, empty hospital beds, and full-time nurses on staff. The methodologies used to estimate hospital demand would be common, and, as a result, there would not be a preponderance of individual analyses in using this method. Furthermore, were such data unavailable, other methods, such as nonparametric estimation or simulation techniques, could be used to estimate underlying hospital demand. Again, these techniques would involve analysis that is common to hospitals and therefore limit greatly the amount of individual analysis required. Hence, the auction methods I described could be utilized here relying on predominantly common evidence.

111. Dr. Scheffman's third criticism [redacted] Specifically, Dr. Scheffman states [redacted]. This criticism is nonsensical for at least two reasons. *First*, the anticompetitive conduct in this matter manifested itself as a collusive, uniform price. It therefore makes sense as a practical matter that the estimation of overall damages compares the collusive uniform price with the competitive uniform price. *Second*, it is irrelevant that hourly billing rates after the DOJ intervened may have varied across AzHHA-member agencies. Indeed, one would expect that to

206. *Id.* ¶¶ 245-46.

occur in response to the government investigation of price fixing. This does not change the fact, however, that if Defendants *could have* constructed a truly competitive bidding system, then that system would have resulted in a competitively-determined uniform base rate. And it is therefore perfectly reasonable to compare this competitive base rate with Defendants' collusively determined base rate during the conduct period to assess damages. Consequently, Dr. Scheffman's critiques of the use of bidding models in this matter are invalid.

VII. ALLEGED EFFICIENCY JUSTIFICATIONS FOR THE CHALLENGED CONDUCT

112. Dr. Scheffman claims that [redacted] In this section, I review each of Dr. Scheffman's [redacted] and show that they neither weaken proof of common impact nor excuse Defendants' anticompetitive conduct.

113. I understand from the Court's previous rulings that the challenged conduct may be *per se* anticompetitive,[207] in which case there is no prospect for efficiency justifications offsetting anticompetitive harm. However, even under a rule-of-reason standard, Dr. Scheffman's conclusions regarding proposed efficiencies are incorrect.

A. Dr. Scheffman's Proposed Efficiencies Rest on Flawed Assumptions and Do Not Impair Class-wide Analysis

114. Dr. Scheffman claims that, to the [redacted][208] Specifically, he argues that, [redacted]

207. Order on Motion to Dismiss, March 19, 2009, at 7 ("For the purposes of this Motion, Plaintiffs have alleged facts sufficient to support a claim of per se illegality.").

208. *Scheffman Report*, ¶ 26.

[redacted] [209] He incorrectly assumes (without any evidence) that [redacted] [210]

115. First, I understand that if Defendants' wrongful conduct caused damages but also has resulted in uncertainty about the extent of damages, Defendants may not benefit from that uncertainty. Moreover, Scheffman's reasoning is irrelevant. But for the wrongful conduct, all bill rates would have been driven up by the ongoing and severe nursing shortage. If nurse "A" worked 100 hours in the actual world at a depressed bill/wage rate, in the but for world, it is logical to conclude the nurse would have worked the same hours—but at a higher bill and wage rate. Dr. Scheffman's argument seems to be premised on the notion that in a but-for world, despite the nursing shortage, bill rates would have gone down instead of up, and hospitals would have purchased from the lower priced agencies (that he appears to assume would have existed). The record here, however, does not support this idea.

116. Because Dr. Scheffman has only stated that [redacted] he has actually demonstrated the anticompetitive effects of Defendants' collusive rate-setting mechanism. [211] That is, with an increase in AzHHA-member agency hours, which is what one would expect of an effectively managed cartel, AzHHA-member hospitals

209. *Id.* ¶ 69.
210. *Id.* ¶ 79.
211. Scheffman Deposition, at 205:13-24. [redacted]

purchased a greater proportion of total hours through AzHHA agencies at the depressed (AzHHA-determined) hourly bill rates, thereby inflicting greater harm on the Class.

B. Dr. Scheffman Fails to Understand That His Purported Efficiencies Would Have Been Preserved in the But-For World

117. Dr. Scheffman claims [redacted] He argues that [redacted][212] Member hospitals also valued AzHHA's agency auditing and quality control. However, Dr. Scheffman fails to cite any credible evidence that Defendants' anticompetitive rate-setting mechanism was *necessary* to achieve these benefits. In fact, as Dr. Scheffman himself has pointed out on multiple occasions, GPOs provide similar benefits to members *without* also fixing prices.

118. Dr. Scheffman suggests [redacted][213] First, I do not understand that price-fixing may be justified (economically or as a legal matter, as I understand it) on the basis that the prices fixed were viewed by those fixing them as more attractive or more "reasonable." Hence, it seems irrelevant whether the hospitals viewed the fixed prices as an incentive to use the Registry. Significantly, the Registry had existed for years prior to 1997, and thus prior to Defendants' price-setting conduct (although as I noted, there is evidence of direct communication about price before 1997 as well). The hospitals obtained temporary nurses through the Registry before 1997. AzHHA

212. *Scheffman Report,* ¶¶ 80-83.
213. *Id.* ¶ 85 [redacted]

reportedly was performing its other functions (such as auditing) before 1997 without also fixing prices. As Becky Kahn testified:

[214]

AzHHA existed as a successful organization and provided efficiencies before 1997. AzHHA hospitals used nurses from member agencies *before* 1997 precisely because AzHHA was able to offer efficiencies in terms of reduced transaction costs and quality assurance. Accordingly, Dr. Scheffman's claim that AzHHA's below-market bill rates were necessary to generate efficiencies is indefensible from an economic perspective.

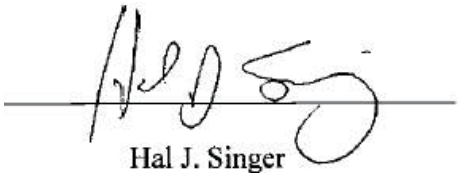
VIII. CONCLUSION

119. Having reviewed Dr. Scheffman's report, backup data, and deposition, I continue to conclude that: (1) impact or injury to all or nearly all members of the proposed Class here can be reliably analyzed and proven through evidence and methods that are common or predominantly so, and that can show on a class-wide basis that all or nearly all members of the Class were underpaid as a result of the conduct being challenged here; and (2) damages here may be reliably calculated in the aggregate for the Class as a whole using any of several standard economic methods and analyses. Further, although I have not reached final conclusions on the merits, I have seen nothing in the record nor in Dr. Scheffman's report or testimony that suggests that the challenged conduct here was anything other than anticompetitive.

214. Kahn Deposition, at 65: 3-14. (objection omitted).

* * *

I declare under penalty of perjury that the foregoing is true and correct. Executed on June 5, 2009.



Hal J. Singer

APPENDIX A: MATERIALS CONSIDERED

All materials cited in this Reply Report:

Academic Articles

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Second Declaration of [redacted] April 29, 2009.

Declaration of [redacted], September 3, 2008.

Declaration of [redacted], Nov. 7, 2008.

Declaration of [redacted], August 12, 2008.

Second Declaration of [redacted] May 20, 2009.

Declaration of [redacted] July 28, 2008.

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Declaration of [redacted], July 25, 2008.

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Declaration of [redacted], October 28, 2008.

Declaration of [redacted], October 1, 2008.

Declaration of [redacted] (undated).

Second Declaration of [redacted], April 24, 2009.

Data

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Dependable Nurses of Phoenix, Inc. agency data production.

Clinical One agency data production.

American Travelers agency data production.

Maxim agency data production.

Premier agency data production.

Supplemental Healthcare agency data production.

Crdentia agency data production.

Depositions (With Exhibits)

Deposition of David Scheffman, 5/8/09.

Deposition of Charles Zomok, PC Healthcare Enterprises vs. Arizona Hospital and Healthcare, et al., 5/4/07.

Deposition of Charles Zomok, 3/18/09.

Deposition of Becky L. Kahn, 4/14/09.

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Deposition of Trudy Tovar, PC Healthcare Enterprises, Inc. v Arizona Hospital and Healthcare Association et al., 5/2/07.

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Deposition of Cynthia Scott, 10/24/08.

Deposition of Cynthia Scott, *Health Temp*, 3/17/07.

Deposition of Billie Lent, *Health Temp,* 5/1/07.

Deposition of Billie Lent, April 30, 2009.

Deposition of Leslie Minjarez, *Health Temp,* 5/10/07.

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HT01827-HT01829

AzNR100176-AzNR100226

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